NEW YORK UNIVERSITY

Tandon School of Engineering
Department of Electrical & Computer Engineering

CS-GY 6233 Introduction to Operating Systems

CS-GS 6233
Fall 2020

General Information:

Instructor : Omar Mansour, Ph.D.

Email : omansour@nyu.edu

Class sessions : Wednesdays, 6:00 to 8:30 pm***, online (zoom)***

Credit Hours : 3

Required Text Book:

Silberschatz, Galvin and Gagne, *Operating System Concepts*, 9th edition, Wiley.

Course Description:

This course covers the functions and organization of operating systems, including process management, memory management, resource allocation, input/output systems and information protection.

Pre-requisites:

Computer architecture

C language programming

Data structures

Course Objectives:

1. Acquiring fundamental knowledge and proficiency in modern operating system design.
2. Learning how to use utilities provided by modern operating systems in developing reliable applications that can interact with the system and with other local or remote applications.

Grading range:

Grade letter	Percentage of available points
A	94-100
A-	88-93
B+	82-87
B	76-81
B-	70-75
C+	64-69
C	58-63
C-	50-57

Grading:

Assignments and participation	: 30%
Mid-term exam	: 30%
Final exam	: 40%

Attendance and Participation policy:

- Attendance and participation includes attendance, class participation (e.g. answering questions posed by the instructor), quizzes, in-class assignments, etc.
- If I notice a significant amount of class absence or lack of participation in assignments, quizzes, etc., I may notify you by email, and it may result in failing or being withdrawn from the course.

Assignments policy:

1. Assignments must be submitted on or before 11:50 pm on the day they are due.
2. Late assignments will not be permitted.
3. Students are required to perform the work pertaining to the assignments **alone.** This includes programming assignments. Students however are encouraged to discuss the concepts pertaining to the course or the assignments with other students or with their teaching assistants, while doing the actual work themselves.
4. Copying of code or answers to homework questions is an act of plagiarism. If the teaching assistant suspects any type of cheating or plagiarism, he/she may ask the student involved for discussing his/her work.

Syllabus (tentative):

1. Introduction to operating systems
2. Processes and threads
3. Inter-process communications
4. Synchronization and deadlocks
5. Scheduling
6. Memory management
7. I/O and file systems

Academic Honesty:

Students at NYU are expected to be honest and forthright in their academic endeavors. Academic dishonesty includes cheating, unapproved collaboration, coercion, inventing false information or citations, plagiarism, tampering with computers, destroying other people's coursework, lab or studio property, theft of course materials, or other academic misconduct. If you have questions regarding this policy, contact your professor *prior* to submitting the work for evaluation. See your academic catalogue for a full explanation.

All students must adhere to the NYU Tandon school of engineering's "Student Code of Conduct", https://engineering.nyu.edu/campus-and-community/student-life/office-student-affairs/policies/student-code-conduct.

All assignments, unless otherwise explicitly listed, are to be done independently. Unless explicit permission from the instructor is provided, no outside sources may be used. If you have any doubts of your sources or their applicability, please contact the instructor as soon as possible.

Anyone caught cheating in this course will receive a "0" on the assignment/assessment and the professor additionally retains the option of significantly reducing the final grade. If a student is caught a second time in, he/she shall fail the course.